

REMARKS

Claims 18-30 are presented for consideration, with claims 18-20 and 25-27 being independent.

As will be appreciated, claims 18-20 are directed to a position detection method and correspond generally to claims 25-27, respectively, which relate to an exposure apparatus. Support for the new claims can be found, for example, beginning on page 10 of the specification.

In the Office Action mailed January 12, 2005, claims 9-17 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Kawakubo '411. Without conceding the propriety of this rejection, claims 9-17 have been canceled.

Moreover, it is submitted that the newly added claims are not taught or suggested by Kawakubo. As discussed in the previous Amendment filed December 14, 2004, Kawakubo relates to an alignment method that positions plural shot areas on a substrate in which two laser beams with a frequency difference are applied to a wafer mark on a wafer from an LIA (Laser Interferometric Alignment) system through a projection optical system. Diffracted light beams generated from the wafer mark are received by first to third light receiving devices, respectively, in the LIA. The first light receiving device receives first interference light comprising $\pm 1^{\text{st}}$ order diffracted light beams, and the second and third light receiving devices respectively receive second and third interference lights comprising 0^{th} order light and 2^{nd} order diffracted light. Alignment is effected by using either of these processing modes in an attempt to provide better measurement reproducibility.

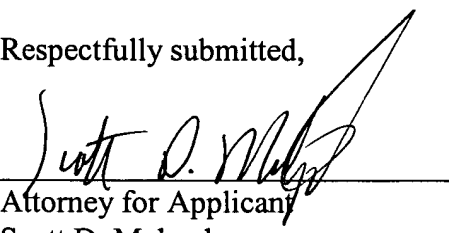
The position detecting method of claim 18 includes a step of obtaining previously prepared data for relating a difference between the first and second detected positions to offset data for offsetting one of the first and second positions. In claim 19, the position detection method provides that a value of a coefficient for weighting the first and second positions is previously obtained so as to minimize a difference of the designed positions of the plurality of the mark and converged positions obtained by converting the weighted positions of the plurality of the mark using a conversion parameter. The position detection method in claim 20 provides that the first and second detecting conditions are different from each other in one of a focus state of an image of the mark, a coherence factor of an illumination optical system for illuminating the mark, numerical aperture of an imaging optical system for imaging the mark, and polarization state of light for illuminating the mark. These are just some of the features of Applicants' claimed invention that are not taught or suggested in Kawakubo.

Accordingly, it is submitted that Applicants' invention as set forth in claims 18-20 and 25-27 is patentable over the cited art. In addition, dependent claims 21-24 and 28-30 set forth additional features of Applicants' invention. Independent consideration of the dependent claims is respectfully requested.

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our address listed below.

Respectfully submitted,



Attorney for Applicant

Scott D. Malpede

Registration No. 32,533

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200
SDM/eab

DC_MAIN 199427v1